

# KINCAID ♦ BRYANT

Consulting Engineers

A professional corporation

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**Mechanical ♦ Electrical ♦ Plumbing ♦ Fire Protection ♦ Value Engineering**

Winchester Building  
10800 Midlothian Turnpike

Suite 266  
Richmond, Virginia 23235

phone: 804-897-5390  
fax: 804-897-3393

To: **All Document Holders**

From: **KINCAID ♦ BRYANT**

Date: January 23, 2008

Comm. No.: 06115

Project: **Southeastern Virginia Training Center  
Replacement of Underground Heating System**

Project Code: **720-10880-23-07**

IFB Number: **07-18**

RE: **Addendum No. 2**

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Ladies & Gentlemen:

Enclosed for your information is a copy of Addendum No. 2, including changes and modifications to the Specifications and Drawings, for the above referenced project.

At the time of submission of bids, written acknowledgment of receipt of this Addendum by the Bidder shall be made in the appropriate blank on the Bid Form.

This Addendum has been issued to all Document Holders on record with our office. Bidders shall see that all Sub-Contractors are properly notified of the applicable provisions herein.

The information in this Addendum supersedes any contradictory information or omission set forth in the Contract Documents, including all previous addendums.

Please attach this addendum to all copies of the Contract Documents in your possession so that they may be brought up-to-date.

Acknowledgment of receipt of this addendum is required on the Bid Form.

Sincerely,



Robert V. Grubbs  
Project Manager/Project Engineer

**End of ADDENDUM NO. 2**

**Addendum No. 2, dated January 23, 2008, to Bidding Documents for Southeastern Virginia Training Center Replacement of Underground Heating System Plans and Specifications dated December 17, 2007, K♦B File No. 06115, Project Code: 720-10880-23-07, IFB Number 07-18.**

**TO:** PLAN HOLDERS OF RECORD

**FROM:** KINCAID ♦ BRYANT, Consulting Engineers  
725 Church Street, 7<sup>th</sup> Floor  
Allied Arts Building  
Lynchburg, VA 24504

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***This Addendum forms a part of the Contract Documents and modifies the Plans and Specifications dated October 26, 2007, as noted below. Acknowledge receipt of this Addendum on the Bid Form. Failure to do so may subject Bidder to disqualification.***

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#### **GENERAL**

1. See attached RFI Responses, Scope Changes, and Clarifications

**END OF ADDENDUM NO. 2**

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## RFI RESPONSES, SCOPE CHANGES, AND CLARIFICATIONS

To: All Document Holders

From: KINCAID ♦ BRYANT

Project: Southeastern Virginia Training Center  
Replacement of Underground Heating System

Project Number: 720-10880-23-07

IFB Number: 07-18

Comm No: 06115

Date: January 22, 2008

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### RFI RESPONSES:

1) Re: Drawings M1 through E4:

Is drywall removal/replacement to be included in the scope of the work? If so, will another site visit be allowed to ascertain the extent of this work?

RESPONSE: We do not anticipate a great deal of drywall work, if any at all (Some may be required in room 156 of Building 28 & 29). Site visits can be coordinated by contacting Brian Crawford at SEVTC at (757) 424-8340 if a contractor feels drywall work will be needed.

2) Re: Gypsum Shaftwall Assemblies

After reviewing the drawings, no new work notes could be found indicating providing a gypsum shaftwall assembly. Please clarify the intent of providing work under this section?

RESPONSE: General note 1 on drawing M5 describes scope of work required. Gypsum shaftwall requirements were removed after BCOM review.

3) Re: M4

Construction note 6 indicates providing attic access. Please provide a detail for construction including any modifications.

RESPONSE: Construction note 6 indicates an existing attic access.

4) Re: M4

Construction note 8 indicates providing a roof access door. Please provide a specification including hardware required and a dimension for the door/frame

RESPONSE: Construction note 8 indicates an existing access door.

5) Re: M3

Demolition note 7 appears to be performed under separate contract by others. Please confirm.

RESPONSE: Correct. The cottage units mentioned in the note do not require demolition.

6) Re: M3

Demolition note 6 indicates removal of attic access. Will this opening need to be enlarged?

RESPONSE: Demolition note 6 indicates an attic access that is existing to remain.

7) Re: M3

Demo note 9 indicates removal of existing roof access door. Please confirm inclusion in the contract scope of work.

RESPONSE: Demolition note 9 indicates a roof access door that is existing to remain.

**SCOPE MODIFICATIONS:**

- 1) The fresh air intakes for all HVAC units on Cottage 1C, 2A, 3D, 4C, and 5D are being demolished. These shall be reinstalled under this contract. Reinstallation shall match existing intakes on similar cottages.
- 2) Refer to attached schedule and sketch SKE-1 for modifications to Electrical systems, with regards to what is being performed under another contract ("Roofing Replacement"), and what shall be part of this contract ("HVAC Project").

**CLARIFICATION:**

Refer to attached schedule for clarification of new heat pump unit locations versus floor plans.

**COPY TO:**

**SIGNED:**



Robert V. Grubbs, PE

### SeVTC Cottage Rooftop Electrical Services Schedule

Cottage	Zone	Existing Conditions			New	New Type MC Cable Between
		MCA	Ckt Brkr	Wire	Disconnect	Panelboard and Disconnect
1A	1	24.1	40	#8	30/3 Nema 3R Unfused	Type MC with (3) #8 w/ (1) #10 EGC
1A	2	22.8	40	#8	30/3 Nema 3R Unfused	Type MC with (3) #8 w/ (1) #10 EGC
1B	1	24.1	40	#8	30/3 Nema 3R Unfused	Type MC with (3) #8 w/ (1) #10 EGC
1B	2	19.3	40	#8	30/3 Nema 3R Unfused	Type MC with (3) #8 w/ (1) #10 EGC
1C	1	30.3	40	#8	60/3 Nema 3R Unfused	Type MC with (3) #8 w/ (1) #10 EGC
1C	2	22.1	40	#8	30/3 Nema 3R Unfused	Type MC with (3) #8 w/ (1) #10 EGC
1D	1	24.1	40	#8	30/3 Nema 3R Unfused	Type MC with (3) #8 w/ (1) #10 EGC
1D	2	22.5	40	#8	30/3 Nema 3R Unfused	Type MC with (3) #8 w/ (1) #10 EGC
2A	1	19.9	40	#8	30/3 Nema 3R Unfused	Type MC with (3) #8 w/ (1) #10 EGC
2A	2	24.1	40	#8	30/3 Nema 3R Unfused	Type MC with (3) #8 w/ (1) #10 EGC
2B	1	23.3	40	#8	30/3 Nema 3R Unfused	Type MC with (3) #8 w/ (1) #10 EGC
2B	2	22.9	40	#8	30/3 Nema 3R Unfused	Type MC with (3) #8 w/ (1) #10 EGC
2C	1	24.1	40	#8	30/3 Nema 3R Unfused	Type MC with (3) #8 w/ (1) #10 EGC
2C	2	18.9	30	#8	30/3 Nema 3R Unfused	Type MC with (3) #8 w/ (1) #10 EGC
2D	1	24.1	40	#8	30/3 Nema 3R Unfused	Type MC with (3) #8 w/ (1) #10 EGC
2D	2	19.7	40	#8	30/3 Nema 3R Unfused	Type MC with (3) #8 w/ (1) #10 EGC
3A	1	24.1	40	#8	30/3 Nema 3R Unfused	Type MC with (3) #8 w/ (1) #10 EGC
3A	2	19.7	40	#8	30/3 Nema 3R Unfused	Type MC with (3) #8 w/ (1) #10 EGC
3B	1	24.1	40	#8	30/3 Nema 3R Unfused	Type MC with (3) #8 w/ (1) #10 EGC
3B	2	22.9	40	#8	30/3 Nema 3R Unfused	Type MC with (3) #8 w/ (1) #10 EGC
3C	1	29.2	40	#8	60/3 Nema 3R Unfused	Type MC with (3) #8 w/ (1) #10 EGC
3C	2	22.1	40	#8	30/3 Nema 3R Unfused	Type MC with (3) #8 w/ (1) #10 EGC
3D	1	24.1	40	#8	30/3 Nema 3R Unfused	Type MC with (3) #8 w/ (1) #10 EGC
3D	2	19.9	40	#8	30/3 Nema 3R Unfused	Type MC with (3) #8 w/ (1) #10 EGC
4A	1	23.8	40	#8	30/3 Nema 3R Unfused	Type MC with (3) #8 w/ (1) #10 EGC
4A	2	15.8	40	#8	30/3 Nema 3R Unfused	Type MC with (3) #8 w/ (1) #10 EGC
4B	1	27	40	#8	30/3 Nema 3R Unfused	Type MC with (3) #8 w/ (1) #10 EGC
4B	2	19.7	40	#8	30/3 Nema 3R Unfused	Type MC with (3) #8 w/ (1) #10 EGC
4C	1	23.8	40	#8	30/3 Nema 3R Unfused	Type MC with (3) #8 w/ (1) #10 EGC
4C	2	23.2	40	#8	30/3 Nema 3R Unfused	Type MC with (3) #8 w/ (1) #10 EGC
4D	1	24.1	40	#8	30/3 Nema 3R Unfused	Type MC with (3) #8 w/ (1) #10 EGC
4D	2	22.1	40	#8	30/3 Nema 3R Unfused	Type MC with (3) #8 w/ (1) #10 EGC
5A	1	24.1	40	#8	30/3 Nema 3R Unfused	Type MC with (3) #8 w/ (1) #10 EGC
5A	2	18.9	40	#8	30/3 Nema 3R Unfused	Type MC with (3) #8 w/ (1) #10 EGC
5B	1	27	40	#8	30/3 Nema 3R Unfused	Type MC with (3) #8 w/ (1) #10 EGC
5B	2	16.9	40	#8	30/3 Nema 3R Unfused	Type MC with (3) #8 w/ (1) #10 EGC
5C	1	21.5	40	#8	30/3 Nema 3R Unfused	Type MC with (3) #8 w/ (1) #10 EGC
5C	2	22.8	40	#8	30/3 Nema 3R Unfused	Type MC with (3) #8 w/ (1) #10 EGC
5D	1	22.3	50	#8	30/3 Nema 3R Unfused	Type MC with (3) #8 w/ (1) #10 EGC
5D	2	21.6	40	#8	30/3 Nema 3R Unfused	Type MC with (3) #8 w/ (1) #10 EGC

#### General Notes

1. Zone 1 indicates living room side of cottage and Zone 2 indicates bedroom side of cottage. Field coordinate zones and unit with facility.
2. #10 is minimum size ground (EGC) for MC cable. Larger is OK.

#### Roof Replacement Project Notes

1. Remove disconnect and conductors between disconnect and panelboard. Abandon concealed conduit in place. Patch roof as required.
2. Remove conduit/conductors between disconnect and rooftop condensing unit.
3. Retain existing panelboard circuit breaker and rooftop condensing unit for re-use.
4. Provide new disconnect for each rooftop condensing unit as indicated. Mount on existing ribbed faced concrete block wall.
5. Provide cable between panelboard and disconnect. Route cable concealed. Secure at 6-foot maximum intervals.
6. Provide conduit/conductors between disconnect and condensing unit. Use rigid steel conduit for most of run with 36" of liquid-tight flexible metal conduit (sealtite) for final connection to condensing unit.

#### HVAC Project Notes

1. All cottage rooftop disconnects are deleted from scope.
2. All conduit and conductor between panelboard and rooftop disconnect are deleted from scope.
3. Panelboard breaker replacements remain in scope.
4. All new conduit between disconnect and rooftop heat pump are deleted from scope.

# KINCAID • BRYANT

## CONSULTING ENGINEERS

MECHANICAL • ELECTRICAL • PLUMBING • FIRE PROTECTION • VALUE ENGINEERING

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RICHMOND

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By: <b>D. KIDD</b>	Date: <b>1/23/08</b>	Proj. No.: <b>06115</b>	Rev: <b>1</b>	SK No.: <b>SKE-1</b>
Client: <b>SOUTHWESTERN VIRGINIA TRAINING CENTER</b>				DWG No.: <b>E1</b>
Project: <b>REPLACE UNDERGROUND HEATING SYSTEM</b>				Page:            of
Subject: <b>COTTAGE BRANCH CIRCUIT SHEDULE</b>				

### COTTAGE A/C BRANCH CIRCUIT SCHEDULE

BUILDING UNIT	FCU		HP	
	BREAKER	WIRE	BREAKER	WIRE
	AMPS/POLES		AMPS/POLES	
1A-N	100/2	2 #3, #8G. - 1" C	20/3	EXISTING
1A-S	100/2	2 #3, #8G. - 1" C	15/3	EXISTING
1B-E	70/2	2 #6, #8G. - 3/4" C	20/1	EXISTING
1B-W	100/2	2 #3, #8G. - 1" C	15/3	EXISTING
1C-N	100/2	2 #3, #8G. - 1" C	20/3	EXISTING
1C-S	100/2	2 #3, #8G. - 1" C	15/3	EXISTING
1D-E	100/2	2 #3, #8G. - 1" C	15/3	EXISTING
1D-W	70/2	2 #6, #8G. - 3/4" C	20/1	EXISTING
2A-N	100/2	2 #3, #8G. - 1" C	15/3	EXISTING
2A-S	100/2	2 #3, #8G. - 1" C	20/3	EXISTING
2B-E	100/2	2 #3, #8G. - 1" C	20/3	EXISTING
2C-N	100/2	2 #3, #8G. - 1" C	15/3	EXISTING
2C-S	70/2	2 #6, #8G. - 3/4" C	20/1	EXISTING
2D-E	100/2	2 #3, #8G. - 1" C	15/3	EXISTING
2D-W	70/2	2 #6, #8G. - 3/4" C	20/1	EXISTING
3A-N	70/2	2 #6, #8G. - 3/4" C	20/1	EXISTING
3A-S	100/2	2 #3, #8G. - 1" C	15/3	EXISTING
3B-E	100/2	2 #3, #8G. - 1" C	20/3	EXISTING
3B-W	100/2	2 #3, #8G. - 1" C	15/3	EXISTING
3C-N	100/2	2 #3, #8G. - 1" C	15/3	EXISTING
3D-E	100/2	2 #3, #8G. - 1" C	20/3	EXISTING
3D-W	100/2	2 #3, #8G. - 1" C	15/3	EXISTING
4A-E	100/2	2 #3, #8G. - 1" C	15/3	EXISTING
4B-N	70/2	2 #6, #8G. - 3/4" C	20/1	EXISTING
4B-S	100/2	2 #3, #8G. - 1" C	15/3	EXISTING
4C-E	100/2	2 #3, #8G. - 1" C	15/3	EXISTING
4D-N	100/2	2 #3, #8G. - 1" C	15/3	EXISTING
5A-N	100/2	2 #3, #8G. - 1" C	15/3	EXISTING
5A-S	70/2	2 #6, #8G. - 3/4" C	20/1	EXISTING
5B-E	100/2	2 #3, #8G. - 1" C	15/3	EXISTING
5C-N	70/2	2 #6, #8G. - 3/4" C	20/1	EXISTING
5C-S	100/2	2 #3, #8G. - 1" C	15/3	EXISTING
5D-E	100/2	2 #3, #8G. - 1" C	15/3	EXISTING

# HEAT PUMP SCHEDULE

UNIT ID	JANITROL MODEL NUMBER	ELECTRICAL SERVICE (V-HZ-PH)	UNIT ID	JANITROL MODEL NUMBER	ELECTRICAL SERVICE (V/HZ/PH)	PLAN VIEW LOCATION
FCU-1A-N	ARUF37431/16	208 - 60 - 1	HP-1A-N	GSH130363A	208 - 60 - 3	RIGHT
FCU-1A-S	ARUF48601/16	208 - 60 - 1	HP-1A-S	GSH130484A	208 - 60 - 3	LEFT
FCU-1B-E	ARUF30301/16	208 - 60 - 1	HP-1B-E	GSH130361/A	208 - 60 - 1	RIGHT
FCU-1B-W	ARUF48601/16	208 - 60 - 1	HP-1B-W	GSH130484A	208 - 60 - 3	LEFT
FCU-1C-N	ARUF37431/16	208 - 60 - 1	HP-1C-N	GSH130363A	208 - 60 - 3	RIGHT
FCU-1C-S	ARUF48601/16	208 - 60 - 1	HP-1C-S	GSH130484A	208 - 60 - 3	LEFT
FCU-1D-E	ARUF48601/16	208 - 60 - 1	HP-1D-E	GSH130484A	208 - 60 - 3	LEFT
FCU-1D-W	ARUF30301/16	208 - 60 - 1	HP-1D-W	GSH130361/A	208 - 60 - 1	RIGHT
FCU-2A-N	ARUF48601/16	208 - 60 - 1	HP-2A-N	GSH130484A	208 - 60 - 3	LEFT
FCU-2A-S	ARUF37431/16	208 - 60 - 1	HP-2A-S	GSH130363A	208 - 60 - 3	RIGHT
FCU-2B-E	ARUF37431/16	208 - 60 - 1	HP-2B-E	GSH130363A	208 - 60 - 3	RIGHT
FCU-2C-N	ARUF48601/16	208 - 60 - 1	HP-2C-N	GSH130484A	208 - 60 - 3	LEFT
FCU-2C-S	ARUF30301/16	208 - 60 - 1	HP-2C-S	GSH130361/A	208 - 60 - 1	RIGHT
FCU-2D-E	ARUF48601/16	208 - 60 - 1	HP-2D-E	GSH130484A	208 - 60 - 3	LEFT
FCU-2D-W	ARUF30301/16	208 - 60 - 1	HP-2D-W	GSH130361/A	208 - 60 - 1	RIGHT
FCU-3A-N	ARUF30301/16	208 - 60 - 1	HP-3A-N	GSH130361/A	208 - 60 - 1	RIGHT
FCU-3A-S	ARUF48601/16	208 - 60 - 1	HP-3A-S	GSH130484A	208 - 60 - 3	LEFT
FCU-3B-E	ARUF37431/16	208 - 60 - 1	HP-3B-E	GSH130363A	208 - 60 - 3	RIGHT
FCU-3B-W	ARUF48601/16	208 - 60 - 1	HP-3B-W	GSH130484A	208 - 60 - 3	LEFT
FCU-3C-N	ARUF48601/16	208 - 60 - 1	HP-3C-N	GSH130484A	208 - 60 - 3	LEFT
FCU-3D-E	ARUF37431/16	208 - 60 - 1	HP-3D-E	GSH130363A	208 - 60 - 3	RIGHT
FCU-3D-W	ARUF48601/16	208 - 60 - 1	HP-3D-W	GSH130484A	208 - 60 - 3	LEFT
FCU-4A-E	ARUF48601/16	208 - 60 - 1	HP-4A-E	GSH130484A	208 - 60 - 3	LEFT
FCU-4B-N	ARUF30301/16	208 - 60 - 1	HP-4B-N	GSH130361/A	208 - 60 - 1	RIGHT
FCU-4B-S	ARUF48601/16	208 - 60 - 1	HP-4B-S	GSH130484A	208 - 60 - 3	LEFT
FCU-4C-E	ARUF48601/16	208 - 60 - 1	HP-4C-E	GSH130484A	208 - 60 - 3	LEFT
FCU-4D-N	ARUF48601/16	208 - 60 - 1	HP-4D-N	GSH130484A	208 - 60 - 3	LEFT
FCU-5A-N	ARUF48601/16	208 - 60 - 1	HP-5A-N	GSH130484A	208 - 60 - 3	LEFT
FCU-5A-S	ARUF30301/16	208 - 60 - 1	HP-5A-S	GSH130361/A	208 - 60 - 1	RIGHT
FCU-5B-E	ARUF48601/16	208 - 60 - 1	HP-5B-E	GSH130484A	208 - 60 - 3	LEFT
FCU-5C-N	ARUF30301/16	208 - 60 - 1	HP-5C-N	GSH130361/A	208 - 60 - 1	RIGHT
FCU-5C-S	ARUF48601/16	208 - 60 - 1	HP-5C-S	GSH130484A	208 - 60 - 3	LEFT
FCU-5D-E	ARUF48601/16	208 - 60 - 1	HP-5D-E	GSH130484A	208 - 60 - 3	LEFT

NOTE:

BEDROOM SIDE = ZONE 2 = PLAN RIGHT

LIVING ROOM SIDE = ZONE 1 = PLAN LEFT